Lateral

Journal of the Cultural Studies Association

Shit in Our Time: An Unsettling Epoch of Metabolic Disturbance

by Daren Shi-chi Leung | Feeding the Civic Imagination, Issue 13.1 (Spring 2024)

ABSTRACT Human waste, often regarded as a source of disease, disgust and impurity, is being redefined as "humanure" by environmental activists, serving as a solution to land degradation in the midst of the anthropogenic crisis. Although a circular view that humans are not merely consumers of food but the producers for healthy soils has arisen, it can easily be overlooked. In China, the beneficial use of human waste, or "nightsoil," for food production has a long history. Drawing from my mother's intimate experience with humanure during the socialist era in China, I explore the metabolic politics of humans and soils. This politics reveals a unique cultural economy that was once constituted to complete a cyclic change from food production to consumption, intertwining the valuation method of humanure, toilet technologies, and the rural–urban exchange. I introduce the context of metabolic disturbance to rethink environmental sustainability in relation to the dynamics of our farming practice and sanitation/disposal system in China and beyond. I propose alternative ways to value human waste, aiming to nourish our civic imagination of food by transforming our metabolic relationship with soil, agriculture, food, and waste.

KEYWORDS China, cultural economy, human, metabolism, waste, wastewater

Narrating Metabolic Intimacy

My narrative begins with a little-discussed food dilemma: the fact that we excrete as much as we consume, posing a challenge of how we *relate* to our waste. I was born in a farming village in Guangdong and moved to Hong Kong in 1996, one year before the handover to China. One thing that made me reluctant to revisit my

village was the public toilet and its unforgettable smell. It was a two-level redbrick building. The upper level was used for excretion, and from that the waste would drop to the ground floor. This waste, also known as nightsoil, would then be collected by contracted villagers for use in food production. My mother told me that this public toilet was constructed to replace all backyard lavatories with the beginning of the socialist era in China. As a teenager, she worked closely with this public toilet, fondly referring to it as a "high-quality fertilizer plant" that supported collective food production.[1]

Nightsoil has long been recognized as an ancient, ecologically sensitive farming technique in China.[2] It allows human waste (*fen*) to be returned to fields as nourishment for plants and soil, embodying a circular view wherein humans are not merely consumers of food but also producers of healthy soils. However, such a perspective is easily forgotten by us who become overly absorbed in viewing our waste as nothing more than an unpleasant byproduct of our modern lives. Recently, environmental activists who promote compost toilets have coined the term "humanure" for human waste, advocating its use to combat global land degradation.[3] Instead of clinging to a waste system that generates unprecedented wastewater, Santos suggests that the agricultural traditions of human waste management in rural Chinese villages could offer valuable insights for alternative, sustainable models in "an age of increasing anthropogenic environmental uncertainties."[4]

A tale of human waste as such is disturbing and stimulating. It suggests what Probyn has called "metabolic intimacy."[5] It is a social and biological account of whether a nutrient cycle is manifested, and one that asks: how does a system of food come to produce the metabolic interaction between humans and soils, in which both participate in the rejuvenation of farming land? This perspective may rejuvenate the famous Marxist critique of the "metabolic rift" as that which reproduces "a separation of the experience and knowledge of human/nature relations from the condition of social life under capitalism."[6] Instead of seeing

human waste as foul and as a pollutant, I want to bring in the Chinese lived experience of valuing human waste—as well as its metabolic relationship connecting humans, food, waste and land—to the vision of our civic imagination of food. It attempts to envision a more-than-human mingling that "brings about the nurturing of a dynamic community of many kinds of being all interacting for mutual survival."[7] In the following, I will weave through my mother's anecdotes to explore the rise and fall of what I have called the "socialist toilet system."[8] I will identify a type of cultural economy of recycling[9] where the cultural significance of human waste is *discursively* established through the evolving context of food production in China.

Cultural Economy of Humanure in Socialist China

My mother was born in the late 1950s, growing up during the second decade of the commune era (1950s–70s). During this period, the Chinese Communist Party adopted a pragmatic, steady strategy for food production to nourish the Chinese populace after the harsh lessons of the Great Famine. The rural commune subsequently introduced the brigade system and its subunit—the production team. My mother's job was to collect various types of waste and produce fertilizer, and she was compensated with "workpoints" by her village's production team. She explained,

I would knock on everyone's door to collect ash from cooking; that earned me 2 points. Then, I would carry it to the dry latrine and mix the ash with dung; another 2 points. We would leave the mixture on the ground level for several weeks, after which we could use it to dress the paddy; 2 more points. It was a dirty job that not many people wanted to do. But if I didn't work in the team, I had no way to get food.[10]

Despite the unpleasantness of the task, my mother appreciated this dirty job, as it provided teenagers like her with a means to contribute to their household income. This labor of humanure involves a "value system" that imparts worth to human waste. It upholds a form of agroecological knowledge that rejects the binary view of humans and nature,[11] as well as the sentimental impediment between the mouth and the anus.[12]

The Workpoint System: Valuing "Dirty" Labor

In socialist China's planned economy, workpoints served as a means of remuneration, favoring local control over annual agricultural planning and the distribution of its output.[13] The workpoints my mother earned through her manure labor were framed within the context of the so-called "professional manure collection team" under the brigade. This team organized labor tasks ranging from manure submission, toilet construction, and maintenance, to compost application in collective farms. For instance, the wages of toilet cleaners were slightly higher than those of equivalent manual workers in the local production team. Members who submitted manure were fairly compensated; some received workpoints, while others were paid in cash from the team's budget.[14]

This value system effectively sustained household food consumption, including rice, sweet potatoes, and vegetables grown in collective and private farms. The fertility of the land directly influenced the annual yield, which, in turn, determined the amount of grain (or cash) distributed to its members. My mother had a unique strategy to submit more manure than others: she knew how to grow or collect green manure, such as legumes and Azolla. This not only increased her workpoints but also allowed her family to purchase "luxury" food items from the village's cooperative store, including meat and snacks for herself like dried sweet potato chips.[15]

The Socio-Technology of Toilets: Towards More-than-Human Health

The most extraordinary act my mother ever undertook during the Cultural Revolution was the demolition of her village temple. Far from being an act of Maoist zeal, her motive was surprisingly practical: "We needed the bricks to transform the public toilet into something new, akin to a high-quality fertilizer plant."[16] This endeavor imbued human waste, or humanure, with a socio-technological function, bridging the metabolic process between humans and the land. Retrofitting village toilets essentially involved equipping them with innovative "scientific compost" technologies.[17] For instance, the three-chamber septic tank toilet—also known as the "wet toilet" in contrast to the dry version my mother referenced—was favored in South China due to high population density. Technically, its sealed environment enabled anaerobic fermentation, enhancing fertility, reducing odors, and more importantly, eliminating germs and flies. This is what scientists today call an exothermic metabolic process.

Simultaneously, public hygiene officers (like barefoot doctors) who were grappling with widespread epidemic diseases (such as dysentery and typhoid) caused by improper human waste disposal were also interested in scientific compost. The promotion of new technologies that made human waste disposal both more sanitary and fertile was regarded as a form of grassroots mobilization. The hygiene officers were tasked with persuading peasants to abandon their "illiteracy, superstition and unhygienic habits" by emphasizing that "the longer our feces are exposed to air, the more nutrients are lost"[18] This socio-technological practice of toilets brought together mass concerns about human hygiene and food productivity. DIY toilet toolkits, complete with experiment reports, were freely provided to local production teams. The rural collective had to find ways, sometimes as drastic as in my mother's case of demolishing temples, to source building materials (like concrete or bricks) for their "high-quality fertilizer plants," adhering to the Maoist virtue of *zili-gengsheng* (self-reliance).[19]

Urban–Rural Circularity: Interplay of Waste and New Political Value

The production team often dispatched male members, including my mother's elder brother, a robust, sun-tanned youth, to nearby towns to collect urban waste. Despite the arduous nature of this task, the workpoints my uncle earned were only slightly higher than my mother's manure work. The manure they brought back was immediately usable as a basal dressing on land, unlike raw nightsoil.[20] This divergence was due to urban initiatives aimed at collectivizing the humanure economy. Local cadres, employing the fiery rhetoric of the Cultural Revolution, painted the private night soil market as "opportunistic, profitable, and treading the capitalist path." This critique highlighted past malpractices, such as individual contractors adulterating feces with straw and counterfeit urine. These excremental habits needed to be *gaizao* (renovated) towards mutual benefit and ethical conduct.[21]

New urban waste treatment infrastructures were now required to facilitate both sanitation and fermentation. Large-scale septic tanks were introduced to store and process the growing daily human waste.[22] Municipal treatment plants converted urban waste into superior manure, which was then sold to nearby production teams on a rotational basis. This logic even extended to areas with sewage systems, where sewage was piped to rural areas for irrigation rather than being discarded into the sea.[23] In essence, urban areas were not just food consumers but also food producers, creating fertilizer for non-human entities like plants and soils.

This intimate metabolic relationship between humans and soils was highlighted by a unique cultural economy that valued and recycled human waste. A sustainable food system needs a sustainable sanitation or disposal system to close the nutrient cycle. It maintained a value system emphasizing agroecological knowledge while boosting the synergy between public hygiene and soil health. It's no surprise that the Food and Agriculture Organization (FAO) once advocated for

“a cyclic change” that returns much of the constituent of manurial value which originally came into the town from the countryside in the form of food, to the farming communities (including peasants and land) themselves.[24]

Metabolic Disturbance and the Aftermath

The cultural perception of human waste in China shifted with the phasing out of the socialist toilet system. As a result, human waste is now often seen as revolting, polluting, or unhygienic—a significant depreciation of its manurial value. This represents a moment when the metabolic process between humans and soils was disrupted, leading to what I refer to as a *metabolic disturbance*. Within this context, discourses of public hygiene and sustainable agriculture are now in competition over the management of human waste.

With the onset of the post-socialist era, the reform state in the 1980s enacted the dissolution of rural communes, shifting towards capitalist development in all aspects. Workpoint methods and professional manure teams were disbanded, leaving no collective support for the humanure economy. Millions of food producers turned into smallholders, making it unaffordable to collect excess manure materials from urban areas. Consequently, the rural-urban exchange collapsed. The “urban trouble with feces” instigated a moral crisis marked by a sense of impurity and revulsion. Precisely speaking, this cultural disturbance left urban waste with nowhere to go, emphasizing the unhygienic nature of human waste. This chaotic management of human waste persisted for a decade until municipalities adopted Western hygiene measures, installing flush toilets and constructing pipes and sewers to dispose of urban pollutants into landfills and bodies of water.[25] Worst of all, the swift increase in the use of chemical fertilizers over the years became a typical response of farmers to this metabolic

disturbance. This shift has been criticized as a move towards capitalist agriculture, leading to the severe environmental pollution we grapple with today.[26]

In understanding humanure as an evolving social practice of human-soil relationships, it's crucial to consider what has remained. How has this social practice adapted amid the metabolic disturbance and other food-related issues (like food safety concerns) in China? A recent survey reveals that 85 percent of rural and ordinary peasants continue to recycle domestic waste to nourish their subsistence farms.[27] Growing food using traditional, organic methods rather than harmful chemicals is increasingly seen as a civic response to recurrent food scandals. Regular consumers are seeking reliable food sources and connecting with farmers who still use organic manure.[28] As my mother and other villagers often say with visceral recognition, "Vegetables grown with humanure have the real taste."[29] Moreover, the practice of using humanure has gained attention from the community-supported agriculture (CSA) movement in China. Young food and rural activists are assisting older farmers, like my mother's generation, to rejuvenate the scientific composting skills they acquired during the commune era. This revitalization forms a part of a regenerative agriculture initiative aimed at sustainable rural development for the health of both producers and the agricultural environment. The produce not only sustains the local farmers but is also sold to urban consumers through the CSA network.[30]

By incorporating the historical and cultural narratives of humanure from China, including its decline and enduring aspects, I argue that we are currently experiencing a significant moment of metabolic disturbance. An unsettling time compels us to rethink our perceptions of human waste, moving beyond its stigmatized image as a contaminated substance—a view that has only been reinforced during the COVID-19 pandemic as health scientists treat it as an infectious material for tracking, controlling, and isolating the virus.[31] Instead, we need to incorporate human excrement into our considerations of public health, envisioning the creation of a "metabolic public." Acknowledging the essential role

our waste plays in the food-waste-soil assemblage could lead to the emergence of a "human-waste commons," potentially facilitating urban agroecological transitions.[32] The concept of metabolic disturbance serves as a lens to understand the evolving, historically grounded realities of human waste, both materially and culturally, in China and beyond. It presents a political disruption distinct from the colonial context of the US, where infrastructure for wastewater—either mitigating or remediating pollution—continues to uphold colonial land relations, as noted by Chow and Gerson, by facilitating the occupation and availability of Indigenous land for settler-colonists.[33]

The term "metabolic disturbance" refers to an environmental disruption that stops the nutrient cycle between humans and non-human entities, a condition some have termed as the global destruction of soil ecology within the Anthropocene or Capitalocene. Following Anna Tsing's insights, this is not just a crisis but an invitation to investigate the "not easy" and diverse odors of our time, to trace the good muck that "guides us towards possibilities of coexistence amidst such environmental disturbance." This muck symbolizes "one way of collaborative survival, [steering us away from] further damage."[34] As my mother insightfully pointed out while comparing two fields cultivated with different fertilizing methods, "Nightsoil has an earthy aroma, while chemicals smell like shit."[35] We must revisit the moral standards we apply to our excremental practices which, driven by fear of disturbance, "limit the potential for new political relationships, responses, and perceptions of waste."[36] Utilizing disturbance to foster a new relationship with our waste and food is a radical proposition of my argument. It calls for a rigorous metabolic approach to a circular model of food production and consumption, one that now includes waste disposal. This approach necessitates our civic imagination and action, urging us to recognize, evaluate, and negotiate the meaning of our body waste.

Acknowledgments

The work described in this paper was partially supported by a Faculty Research Grant from Lingnan University (Project no. 101912), and a grant of the Early Career Scheme from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No. 23602622).

Notes

1. Li Kwok-ying, interview by author, Hong Kong, January 20, 2018, my translation.
2. Franklin F. King, *Farmers of Forty Centuries or Permanent Agriculture in China, Korea, and Japan* (Emmaus, PA: Rodale Press, 1911).
3. Guardian Environment Network, "Humanure: the End of Sewage as We Know It?" (*The Guardian*, May 12, 2009).
4. Gonçalo Santos, *Chinese Village Life today: Building Families in an Age of Transition* (Seattle: University of Washington Press, 2021), 173.
5. Elspeth Probyn, "Dirt, Dung, Soil: Metabolic Intimacies," *Counter Magazine* 1 (2019): 43–5.
6. Mindi Schneider and Philip McMichael, "Deepening, and Repairing, the Metabolic Rift," *Journal of Peasant Studies* 37, no. 2 (2010): 479–80, https://doi.org/10.1080/03066150.2010.494371 < https://doi.org/10.1080/03066150.2010.494371> .
7. Probyn, "Dirt, Dung, Soil," 45
8. Shi-chi Leung, *Farming as Method: Contextualising the Politics of Food and Farming in South China* (unpublished PhD thesis, University of Sydney, 2021), 53.
9. Gay Hawkins, *The Ethics of Waste: How We Relate to Rubbish* (Oxford: Rowman & Littlefield Publishers, 2006), 96.
10. Li, interview, author's translation.
11. Schneider and McMicheal, "Deepening, and Repairing," 477.
12. Probyn, "Dirt, Dung, Soil."
13. Joshua Eisenman, *Red China's Green Revolution: Technological Innovation, Institutional Change, and Economic Development Under the Commune* (New York: Columbia University Press, 2018), 31.

14. *Beifang nongcun weisheng "liangguan wugai" ziliao huibian* (*North China's rural hygiene: "Two managements, five changes" recourse edition*), (Beijing: People's Medical Publishing House Co., LTD., 1974), 79.

15. Li, interview, author's translation.

16. Li, interview.

17. Sigrid Schmalzer, *Red Revolution, Green Revolution: Scientific Farming in Socialist China* (Chicago: University of Chicago Press, 2016), 13.

18. *Nongcun weisheng liangguan wugai changshi* (*Common sense of rural hygiene: Two managements, five changes*) (Anhui: Anhui Renmin Press, 1977), 2–7.

19. *Common Sense of Rural Hygiene*, 60–95.

20. Li Seui-wing, interview by author, Enping county, February 4, 2018.

21. *Nanfang nongcun weisheng "liangguan wugai" ziliao huibian (South China's rural hygiene: "two managements, five changes" recourse edition*) (Beijing: People's Medical Publishing House, 1975), 40.

22. FAO, *China: Recycling Organic Wastes in Agriculture* (FAO Soils Bulletin, 1975), 6.

23. FAO, *China*, 6.

24. FAO, *China*, 6.

25. Leung, *Farming as Method,* 76–8.

26. Donald Worster, "The Good Muck. Toward an Excremental History of China," *RCC Perspectives* 5 (2017): 45-6.

27. Ying Liu et al., "Use of Human Excreta as Manure in Rural China," *Journal of Integrative Agriculture* 13, no. 2 (2014): 435, https://doi.org/10.1016/S2095-3119(13)60407-4 < https://doi.org/10.1016/S2095-3119(13)60407-4> .

28. Zhenzhong Si et al., "'One Family, Two Systems': Food Safety Crisis as a Catalyst for Agrarian Changes in Rural China," *Journal of Rural Studies* 69 (2019): 88, https://doi.org/10.1016/j.jrurstud.2019.04.011 < https://doi.org/10.1016/j.jrurstud.2019.04.011> .

29. Li, interview, author's translation.

30. Daren Shi-chi Leung, "Convivial Agriculture: Evolving Food and Farming Activism in South China," *China Perspectives* 2 (2021): 35, https://doi.org/10.4000/chinaperspectives.11674 < https://doi.org/10.4000/chinaperspectives.11674> ; Daren Shi-chi Leung, "Reviving Community Agrarianism in Post-socialist China," in *Beyond Global Food Supply Chains Crisis, Disruption, Regeneration*, eds. Victoria Stead and Melinda

Hinkson (Singapore: Springer Nature, 2022), https://doi.org/10.1007/978-981-19-3155-0_6 < https://doi.org/10.1007/978-981-19-3155-0_6> . ↩

31. Jeremy Chow and Sage Gerson, "Wasted: Wastewater, Hygiene Theatrics, and Contaminated Imaginaries," *Lateral* 11, no.1 (2022), https://doi.org/10.25158/L11.1.2 < https://doi.org/10.25158/L11.1.2> . ↩

32. Markus Wernli, "Intriguing Human-Waste Commons: Praxis of Anticipation in Urban Agroecological Transitions," in *Design Commons: Practices, Processes and Crossovers*, ed. Gerhard Bruyns and Stavros Kousoulas (Cham: Springer International Publishing 2022), 161. ↩

33. Chow and Gerson, "Wasted." ↩

34. Anna L. Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton, N.J.: Princeton University Press, 2015), 4, 14. ↩

35. Li, interview, author's translation. ↩

36. Gay Hawkins, "Down the Drain: Shit and the Politics of Disturbance," in *Culture and Waste: The Creation and Destruction of Value*, ed. Gay Hawkins and Stephen Muecke (Lanham, Md.: Rowman & Littlefield Publishers, 2003), 50. ↩

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Article details

Daren Shi-chi Leung, "Shit in Our Time: An Unsettling Epoch of Metabolic Disturbance," *Lateral* 13.1 (2024).

https://doi.org/10.25158/L13.1.15

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Lateral is the peer-reviewed, open access journal of the Cultural Studies Association.

ISSN 2469-4053